

REMARKS/ARGUMENTS

Claims 21 and 60-73 are now active in this application, non-elected claims 1-20 and 22-59 having been cancelled by the present amendment. Claim 21 has been amended to specify that slice S(h) and slice S(i) are adjacent one another, and the repetition of steps (b) and (c) of the method are performed on further successive and adjacent slices thereafter. This amendment is supported by the description of the method at pages 47-52 and 82-87 of the present specification. New claims 60-61 are supported by the specification at these same pages. New claims 62-73 further define the fibers used in the fiber alignments of the present method and are supported by original claims 1-11. No new matter has been added by these amendments.

The present invention provides a method for determining the position of each fiber unit in each slice of a fiber alignment, throughout any number of sequentially adjacent fiber alignment slices S(1), S(2), ... S(h), ... S(m). This is done by (a) sequentially cutting a fiber alignment into m slices, (b) selecting any given slice S(h) from the m slices, and determining two-dimensional coordinates for each fiber unit contained in the slice, (c) using these two-dimensional coordinates for each fiber unit of slice S(h) to determine the two-dimensional coordinates of each fiber unit in adjacent (the next sequential) slice S(i), then repeating steps (b) and (c) to determine the two-dimensional coordinates of each successive and adjacent slice.

The Examiner's comments regarding incorporation of documents by reference is noted, although it is Applicants position that the Examiner is misinterpreting the noted cases to require a pinpoint identification of portions of a document being incorporated. This is only the case if only a portion of the document is to be incorporated. Otherwise, Applicants may incorporate entire documents for that which they teach. However, at this point, since there are no enablement or written description rejections, this is a moot point.

The rejection under 35 U.S.C. 112, second paragraph is believed obviated by the present amendment which specifies that slice S(i) be adjacent slice S(h) (i.e. the next successive slice made in the fiber bundle). Accordingly, this rejection should be withdrawn.

Claims 21 stands rejected under 35 U.S.C. 102(e), (g) or 35 U.S.C. 103 over Stimpson. Stimpson discloses the preparation of fiber arrays by cutting slabs along the Z axis of a bundle assembled from the various fiber array elements. It is noted that Stimpson describes two main types of embodiment, namely rod type and sheet type. The only one of these that is relevant to the present invention is the rod type embodiment, which requires putting binding compounds onto rod shaped array elements, then forming a bundle of such rod shaped array elements, cutting the bundle into slabs, exposing the slabs and identifying the binding events. However, Stimpson teaches nothing regarding the determination of fiber positions in consecutive slices. As required in the present invention, the positions of fibers in consecutive, adjacent slices are determined with high precision, based upon the coordinates of the fiber positions in the previous adjacent slice. In this manner, the present invention permits detection of signals from such microarrays with extreme precision using a high-resolution analyzer.

Note that while Stimpson requires creative use of colored rods and geometric arrangements as identifiers for each rod shaped element (thus limiting the total number of rod shaped elements that can be used in a particular array), the present invention does not require the use of colored fiber elements. Applicants note that while colored fibers are used in the example at pages 82-87 for illustrative purposes, the present invention can be operated without such colored rods, based on the relative coordinates of the various fiber elements, with respect to one another or with respect to some other marker. No such method is provided by Stimpson. As such, Stimpson can neither anticipate nor render the present invention obvious and the rejection should be withdrawn.

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Applicants submit that the application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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